

United States Patent and Trademark Office

UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, Virginia 22313-1450 www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/717,543	11/21/2003	Thomas Gerlach	7966 EXAMINER	
75	90 08/29/2005			
BRENEMAN & GEORGES 3150 Commonwealth Avenue Alexandria, VA 22305			. CHUKWURAH,	NATHANIEL C
			ART UNIT	PAPER NUMBER
•			3721	
		DATE MAILED: 08/29/2005		

Please find below and/or attached an Office communication concerning this application or proceeding.

Talá

		Application No.	Applicant(s)			
Office Action Summers		10/717,543	GERLACH ET AL.			
	Office Action Summary	Examiner	Art Unit			
		Nathaniel C. Chukwurah	3721			
The MAILING DATE of this communication appears on the cover sheet with the correspondence address Period for Reply						
A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION. - Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication. - If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely. - If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication. - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).						
Status						
1)[∑	Responsive to communication(s) filed on <u>02 M</u>	<u>1ay 2005</u> .				
2a)[∑	☐ This action is FINAL . 2b)☐ This	s action is non-final.				
3)□	Since this application is in condition for allowa	nce except for formal matters, pro	secution as to the merits is			
	closed in accordance with the practice under Ex parte Quayle, 1935 C.D. 11, 453 O.G. 213.					
Disposition of Claims						
4)∑	Claim(s) <u>1-23,26 and 27</u> is/are pending in the	application.				
	4a) Of the above claim(s) is/are withdra	wn from consideration.				
5)[Claim(s) is/are allowed.	•				
6)⊠ Claim(s) <u>1-23,26 and 27</u> is/are rejected.						
7)[7) Claim(s) is/are objected to. 8) Claim(s) are subject to restriction and/or election requirement.					
8)[
Application Papers						
9)[9) The specification is objected to by the Examiner.					
•)⊠ The drawing(s) filed on <u>21 November 2003</u> is/are: a)⊠ accepted or b)□ objected to by the Examiner.					
, –	Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).					
	Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).					
11)[The oath or declaration is objected to by the Ex	xaminer. Note the attached Office	Action or form PTO-152.			
Priority under 35 U.S.C. § 119						
12)⊠ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).						
	a)⊠ All b)□ Some * c)□ None of:	phony under do c.c. g 110(a)	, (6) 5. (1).			
•	1.⊠ Certified copies of the priority documents have been received.					
	2. Certified copies of the priority documents have been received in Application No					
	Copies of the certified copies of the priority documents have been received in this National Stage					
	application from the International Bureau (PCT Rule 17.2(a)).					
* See the attached detailed Office action for a list of the certified copies not received.						
A44	and/al					
Attachment(s) 1) Notice of References Cited (PTO-892) 4) Interview Summary (PTO-413)						
2) No	rtice of Draftsperson's Patent Drawing Review (PTO-948)	Paper No(s)/Mail Da	ate			
3) Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) 5) Notice of Informal Patent Application (PTO-152)						
Pa	Paper No(s)/Mail Date 6) Other:					

U.S. Patent and Trademark Office PTOL-326 (Rev. 1-04) Application/Control Number: 10/717,543

Art Unit: 3721

DETAILED ACTION

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 1-23 and 26-27 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 1 recites "the distance" in line 10, it lacks proper antecedent basis.

Claim 2 recites "the distance" in line 6, it lacks proper antecedent basis.

Claim 26 recites "the distance" in line 6; "said sheet-like material" in lines 6-7, the phrases lack proper antecedent basis.

Claim 27 recites "the distance" in line 4, it lacks proper antecedent basis.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claims 1-13 and 26-27 are rejected under 35 U.S.C. 103(a) as being unpatentable over Boss et al. (US 6,142,353) in view of Radtke et al. (US 5,005,751).

With regard to claims 1, 2, 4 and 26, Boss et al. discloses a stapling device including a staple carriage (15) having two stapling heads (16), which travel with the continuously-conveyed products (11) during a stapling process (col. 3, lines 15-18).

Boss et al. fails to teach stapling heads and clinchers being adjustable to the other and a drive unit for setting the distance between the stapling heads and between clinchers.

Radtke et al. teaches stapling heads (15), one of which is adjustable relative to the stapling head, respective clinchers operating with the stapling heads, one of clincher and an electrically actuated drive unit (42, 44) for setting the distance between the stapling heads (15) and between the clinchers.

Therefore, it would have been obvious to one skilled in the art at the time of the invention to modify the stapling device of Boss et al. by providing the stapling heads of Boss et al. with one drive unit for adjusting the stapling heads as taught by Radtke et al., in order to adjust the stapling heads to various stapling distances (col. 1, lines 47-48) and further, in order to adjust the stapling heads for different signatures.

With regard to claims 3 and 6, Boss et al. shows stapling heads and clinchers, movably disposed in a linear guide (31, 71).

With regard claim 5, Boss et al. shows a clincher drive (106 pivotable cam roller) coupled to a drive (39) for at least one stapling head (16).

With regard to claims 7 and 8, Boss et al. shows the linear guide (31) is supported against staple carriage (15) substantially along the length of the linear guide (31).

With regard to claim 9, the modified stapling device of Boss et al. would include a spindle drive (18) disclosed in the Radtke et al. reference for setting the distance between the stapling heads and clinchers.

With regard to claim 11, Boss et al. does not expressly state that the stapling device includes a reference position on the stapling head or clincher, however, the stapling device is capable of having a reference position for stapling sheet-like material.

With regard to claim 14, the modified stapling device of Boss et al. would include a locking device (thread) disclosed in the Radtke et al. reference, for holding in place the stapling head and one clincher.

With regard to claim 15, the modified stapling device of Boss et al. would include a drive (42) disclosed in the Radtke et al. reference, for actuating the locking device.

With regard to claim 16, the modified stapling device of Boss et al. would include an electrically actuate drive (42) disclosed in the Radtke et al. reference, for actuating the locking device. With regard to claim 17, the modified stapling device of Boss et al. would include a locking device being a clamping device (thread) which is equivalent to a clamping device disclosed in the Radtke et al. reference.

With regard to claims 18 and 19, the modified stapling device of Boss et al. would include a moveable clamping component (44 gear wheel) connected to the stapling head, fixed relative to the stapling carriage (11) disclosed in the Radtke et al. reference.

With regard to claim 20, Boss et al. show a clamping device (66 retaining plate) separate from the guide (19 sliding member).

With regard to claim 23, Boss et al. shows force transmission device (42 cam lever).

With regard to claim 27, Boss et al. discloses a moveable staple carriage (15), at least two stapling heads (16) and a linear guide (31) for moving staple carriage except a drive unit for setting a distance between the two stapling heads.

Application/Control Number: 10/717,543

Art Unit: 3721

Radtke et al. teaches stapling heads (15), one of which is adjustable relative to each other; and one drive unit (42, 44) for setting the distance between the stapling heads (15).

Therefore, it would have been obvious to one skilled in the art at the time of the invention to modify the stapling device of Boss et al. by providing the stapling heads of Boss et al. with one drive unit for adjusting the stapling heads as taught by Radtke et al. in order to adjust the stapling heads to various stapling distances (col. 1, lines 47-48).

Claims 10, 12 and 13 are rejected under 35 U.S.C. 103(a) as being unpatentable over Boss et al. in view of Radtke et al. as applies to claim 1 and further in view of Steinert et al. (US 2003/0061700).

With regard to claim 10, the modified Boss et al. lacks a position sensor, however,

Steinert et al. discloses a position sensor (14) for registering the position of the product to be
stapled. Therefore, it would have been obvious to one skilled in the art at the time of the
invention to provide the modified stapling device of Boss et al. with a position sensor as taught
by Steinert et al. in order to register the position of the product to be stapled (Page. 2, lines 2324). With regard to claim 12, the modified Boss et al. lacks a position controller, however,
Steinert et al. discloses a position controller (control unit) for ensuring that the staple is always
placed exactly at a predetermined point on the product (Page 2, lines 39-41).

Therefore, it would have been obvious to one skilled in the art at the time of the invention to provide the modified stapling device of Boss et al. with a position controller as taught by Steinert et al. in order to ensure that the staple is always placed exactly at a predetermined point on the product (Page 2, lines 39-41).

Art Unit: 3721

With regard to claim 13, the modified stapling device of Boss et al. lacks a collision sensor, however, one skilled in the art would have included a collision sensor in order to prevent jamming of the sheets and/or the coming together of the stapling heads and clinchers.

Allowable Subject Matter

Claims 21 and 22 would be allowable if rewritten to overcome the rejection(s) under 35 U.S.C. 112, 2nd paragraph, set forth in this Office action and to include all of the limitations of the base claim and any intervening claims.

The following is a statement of reasons for the indication of allowable subject matter:

The art of record considered as a whole, lone or in combination, neither anticipates nor renders obvious a stapling device comprising in combination a clamping device which includes a pressure component for exerting a force perpendicular to the shifting direction of the corresponding stapling head and clincher. Further, the art of record considered as a whole, lone or in combination, neither anticipates nor renders obvious a stapling device comprising in combination, wherein the pressure component for the clamping device is provided by a pressure piston.

Response to Arguments

Applicant's arguments with respect to claims 1-3 have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Nathaniel C. Chukwurah whose telephone number is (571) 272-4457. The examiner can normally be reached on M-F 6:00AM-2:30PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Rinaldi Rada can be reached on (571) 272-4467. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

NC

July 5, 2005.

LOUIS K. HUYNH PRIMARY EXAMINER